

C2 Policy Panel:

Under the avalanche, which way is up?

2006 Command and Control Research and Technology Symposium

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What Avalanche?

- Exponential rates of technological change
- Joint, Coalition, Multi-Agency Collaboratives
- Information Glut
- Distributed, unconventional, evolving & proliferating threats
- Compressed cycle times

Policy for What Purpose?

- ✓ Neutralizing threats
- ✓ Increasing bang for the buck
- ✓ Improving continuously
- ✓ Enhancing agility and adaptability

Two Competing Meta-Policies

	Centralized	Decentralized
Success Concept	Optimized plan	Accelerated innovation
Model	Waterfall, Command economy	Entrepreneurship, Natural Selection
Suitable Environment	Known, Uniform, Slowly changing	Dynamic, Diverse, Uncertain
Organizational Design	Hierarchy	Networked collaboratives
Command & Control	Deliberate Planning, Operational Orders	Shared intent, Local initiative, Feedback
System Acquisition	Prescriptive, Top-Down	Opportunistic, Bottom-Up
Strength	Hits chosen target, Unity of command	Adapts to reality, Exploits advances
Weakness	High cost of failure, Slow and rigid	Unpredictable, Uncontrollable

Centralization Won't Work

The problem is precisely how to ... dispense with the need of conscious control, and how to provide inducements which will make the individuals do the desirable things without anyone having to tell them what to do.

...there is something fundamentally wrong with an approach which habitually disregards an essential part of the phenomena with which we have to deal: the unavoidable imperfection of man's knowledge and the consequent need for a process by which knowledge is constantly communicated and acquired.

Hayek, F. A., "The Use of Knowledge in Society." *American Economic Review*, XXXV, No. 4; September, 1945, pp. 519-30.

[Man] will therefore have to use what knowledge he can achieve, not to shape the results as the craftsman shapes his handiwork, but rather to cultivate a growth by providing the appropriate environment, in the manner in which the gardener does this for his plants.

Hayek, F. A., – Prize Lecture, Lecture to the memory of Alfred Nobel, December 11, 1974

Top-Priority Policy Imperatives

- **Apply supply chain integration innovations to information chains and kill chains**
- **Implement net-centric benefits incrementally through a series of value-delivery chains**
- **Focus on end-to-end processes to minimize centralization, unleash local innovation & reward measured improvements**
- **Institutionalize continuous improvement through emulated natural selection**
- **Foster open markets for capabilities**
- **Distribute control of resources to “consumers” and, through them, to suppliers**